

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

MICHAEL ABRACZINSKAS  
Director



**DRAFT – March 23, 2020**

Mr. Donald Cochran  
Plant Manager  
Global Skyware  
1315 Outlet Center Drive  
Smithfield, NC 27577

SUBJECT: Air Quality Permit No. 05529T27  
Facility ID: 5100024  
Global Skyware  
Smithfield, Johnston County  
Fee Class: Title V  
PSD Class: Major

Dear Mr. Cochran:

In accordance with your completed Air Quality Permit Application for a Renewal your Title V permit received June 21, 2019, we are forwarding herewith Air Quality Permit No. 05529T27 to Global Skyware, 1315 Outlet Center Drive, Smithfield, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



North Carolina Department of Environmental Quality | Division of Air Quality  
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641  
919.707.8400

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Johnston County has triggered increment tracking under PSD for PM<sub>10</sub> and SO<sub>2</sub>. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXXX, 2020 until XXXX, 2025, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Judy Lee at 919-707-8729 or [judy.lee@ncdenr.gov](mailto:judy.lee@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortin, EPA Region 4  
Connie Horne (cover letter only)  
Raleigh Regional Office  
Central Files

## ATTACHMENT to Permit No. 05529T27

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-06642	Cold Solvent Degreaser Tank (fugitive) #7
IS-00137	Cold Solvent Degreaser Tank (fugitive)
IS-00147	Cold Solvent Degreaser Tank (fugitive)
IS-20091	Burn-off Oven (for paint hangers)
IS-10047 and IS-10147	Two Robotic Welders with dust collector (vent inside)
IS-77750	#50 Repair Station
IS-04650	Mold Deflashing Area with fugitive dust baghouse
IS-GEN <b>MACT ZZZZ</b>	Diesel-fired emergency generator (191 horsepower maximum capacity)
Powder paint line – Dept 52 (booth vents inside) consisting of:	
IS-10	Bake (dry off) oven (natural gas)
IS-11	Bake (cure) oven (natural gas)
IS-12 and IS-13	Two (entrance and exit) paint line spray washes (natural gas)
IS-12052 and IS-50052	Two (#1 & #4) heated wash tanks (natural gas)
Powder paint line – Dept 91 (booth vents inside) consisting of:	
IS-21	Bake (dry off) oven (natural gas)
IS-24	Bake (cure) oven (natural gas)
IS-18 and IS-19	Two (entrance and exit) paint line spray washes (natural gas)
IS-10091	Heated wash tank (natural gas)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

### Summary of Changes to Permit

The following changes were made to the Global Skyware formerly Raven Antenna Systems – dba Skyware Global, Smithfield, Air Permit No. 05529T26:

Page Number	Section	Description of Changes
Cover letter	NA	<ul style="list-style-type: none"> <li>• Updated name per facilities request (Form AA3 received March 19, 2020) from “Raven Antenna Systems – dba Skyware Global” to “Global Skyware”</li> <li>• Updated permit revision and dates</li> <li>• Updated increment statement</li> </ul>
Cover Letter Attachment	Insignificant Activities List	<ul style="list-style-type: none"> <li>• Revised notation for 4Z</li> <li>• Added an additional Robotic Welder (ID No. IS-10147) per email from Raven on February 26, 2020.</li> </ul>
	Table of Changes	<ul style="list-style-type: none"> <li>• Updated for changes made to permit for this modification</li> </ul>
Permit Cover	NA	<ul style="list-style-type: none"> <li>• Revised new issuance and complete application date, application number and permit Nos.</li> </ul>
1 – 40	Globally	<ul style="list-style-type: none"> <li>• Updated name per facilities request from “Raven Antenna Systems – dba Skyware Global” to “Global Skyware”</li> <li>• Updated Permit Revision Number in header</li> <li>• Updated permit language based on current guidance</li> <li>• Removed reference to Thick Molding Compound (TMC) per email from Raven on March 3, 2020</li> </ul>
3 – 4	1	<ul style="list-style-type: none"> <li>• Revised page numbers to table</li> <li>• Updated MACT notations</li> <li>• Removed TMC per facility request</li> <li>• Removed minor modification language for emission source (ID No. ES00167)</li> </ul>
12 – 13 (previous permit)	2.1. C.4.	<ul style="list-style-type: none"> <li>• Removed Case-by-Case MACT condition (no longer applies)</li> </ul>
9 – 15	2.1. C.4. & C.5.	<ul style="list-style-type: none"> <li>• Revised boiler MACT conditions provided by Mr. Voelker replaced the existing boiler MACT condition</li> </ul>
17 – 18 (previous permit)	2.2. A.1.	<ul style="list-style-type: none"> <li>• Removed 02D .0958 condition (no longer applies)</li> </ul>
31 – 40	3	<ul style="list-style-type: none"> <li>• Updated General Conditions to Version 5.3 (08/21/2018)</li> </ul>



State of North Carolina  
Department of Environmental Quality  
Division of Air Quality

## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
05529T27	05529T26	XXXX, 2020	XXXX, 2025

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee:** **Global Skyware**  
**Facility ID:** **5100024**

**Facility Site Location:** **1315 Outlet Center Drive**  
**City, County, State, Zip:** **Smithfield, Johnston County, North Carolina 27577**

**Mailing Address:** **1315 Outlet Center Drive**  
**City, State, Zip:** **Smithfield, North Carolina 27577**

**Application Numbers:** **5100024.19A**  
**Complete Application Date:** **June 21, 2019**  
**Primary SIC Code:** **3679**

**Division of Air Quality,**  
**Regional Office Address:** **Raleigh Regional Office**  
**1628 Mail Service Center**  
**Raleigh, North Carolina 27609**

Permit issued this the XX<sup>th</sup> day of XXXX 2020

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William D. Willets, P.E., Chief, Air Permitting Section  
By Authority of the Environmental Management Commission

## Table Of Contents

SECTION 1: PERMITTED EMISSION SOURCE(S) AND ASSOCIATED  
AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1 - Emission Source(s) Specific Limitations and Conditions  
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 - Multiple Emission Source(s) Specific Limitations and Conditions  
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 - Permit Shield for Nonapplicable Requirements

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT  
List of Acronyms

## SECTION 1 - PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Reinforced Plastic Composites: Sheet Molding Compound Manufacturing and Molding Operations, and Storage</b>				
5-7, 16-19	ES00150, ES01150, ES02150, ES03150, ES04150, and ES05150 <b>MACT WWW</b>	Six compression presses (2,000; 700; 1,000; 2,000; 1,500; and 1,500 tons, respectively)	N/A	N/A
5-7, 16-19	ES00050 <b>MACT WWW</b>	SMC Compound storage room	N/A	N/A
5-7, 16-19	ES00167 <b>MACT WWW</b>	SMC machine	N/A	N/A
5-7, 16-19	ES01267 <b>MACT WWW</b>	Styrene bulk storage tank (7,700 gallon capacity)	N/A	N/A
5-7, 16-19	ES01367 <b>MACT WWW</b>	Liquid polyester (LP) resin bulk storage tank (10,153 gallon capacity)	N/A	N/A
5-7, 16-19	ES01467 <b>MACT WWW</b>	Polyester resin bulk storage tank (10,153 gallon capacity)	N/A	N/A
5-7, 16-19	ES01867 <b>MACT WWW</b>	SMC paste weighing station	N/A	N/A
5-7, 16-19	ES02167 <b>MACT WWW</b>	SMC paste mixing station	N/A	N/A
<b>Surface Coating Operations - Plastic &amp; Metal Parts and Products</b>				
<b>Spray Paint Operations (ID No. ES-SP) consisting of:</b>				
7-9, 16, 19-28	ES00451 <b>MACT PPP</b>	SMC paint IR bake oven	N/A	N/A
7-9, 16, 19-28	ES00651 <b>MACT PPP</b>	SMC paint touch-up booth	N/A	N/A
7-9, 16, 19-28	ES00951 <b>MACT PPP</b>	SMC paint spray booth (#2)	N/A	N/A
7-9, 16, 19-28	ES01051 <b>MACT PPP</b>	SMC paint spray booth (#1)	N/A	N/A
7-9, 16, 19-28	ES01151 <b>MACT PPP</b>	SMC paint room	N/A	N/A
7-9, 16, 19-28	ES60051 <b>MACT PPP</b>	SMC paint flash-off tunnel (five exhaust fans)	N/A	N/A

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Pad Printing Operations (ID No. ES-PRT) consisting of:</b>				
7-9, 16, 19-28, 29	ES00187, ES03165, ES03265, ES03365, ES03865, ES03965, ES11050, ES11150, ES11250, ES11450, and ES11550 <b>MACT PPPP &amp; MMMM</b>	Eleven pad printers (for printing logos on metal and composite satellites)	N/A	N/A
<b>Boilers and Process Heaters</b>				
9-13	ES-03140 <b>MACT DDDDD</b>	Natural gas-fired boiler (8.4 million Btu per hour heat input capacity)	N/A	N/A
9-13	ES-03240 <b>MACT DDDDD</b>	Natural gas-fired boiler (8.4 million Btu per hour heat input capacity)	N/A	N/A
9-10 13-15	ES-04450 <b>MACT DDDDD</b>	Natural gas-fired boiler (2.4 million Btu per hour heat input capacity)	N/A	N/A
9-10 13-15	ES-04550 <b>MACT DDDDD</b>	Natural gas-fired boiler (2.4 million Btu per hour heat input capacity)	N/A	N/A



## SECTION 2 – SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1 Emission Source(s) and Control Device(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

#### A. Fiberglass Reinforced Polyester Resin Manufacturing and Molding Operations consisting of:

- Six compression presses (ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150 and ES05150),
- SMC Compound storage room (ID No. ES00050),
- SMC machine (ID No. ES00167),
- Styrene bulk storage tank (ID No. ES01267),
- Liquid polyester resin bulk storage tank (ID No. ES01367),
- Polyester resin bulk storage tank (ID No. ES01467),
- SMC paste weighing station (ID No. ES01867), and
- SMC paste mixing station (ID No. ES02167)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For $P \leq 30$ , $E = 4.10 \times P^{0.67}$ For $P > 30$ , $E = 55.0 \times P^{0.11} - 40$  Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odors	<b>State-enforceable Only</b> See Section 2.2.A.	15A NCAC 02D .1806
Volatile organic compounds	See Section 2.2.B	15A NCAC 02Q .0317 for 02D .0530 PSD Avoidance
Hazardous air pollutants	See Section 2.2.C.	15A NCAC 02D .1111 MACT WWWW

#### 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150, ES05150, ES00050, ES00167, ES01267, ES01367, ES01467, ES01867, and ES02167) shall not exceed an allowable emission rate as calculated by the following equations:

$$E = 4.10 \times P^{0.67} \quad (\text{for process rates less than or equal to 30 tons per hour}), \text{ or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad (\text{for process rates greater than 30 tons per hour})$$

Where E = allowable emission rate in pounds per hour  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates “P” in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from these sources (**ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150, ES05150, ES00050, ES00167, ES01267, ES01367, ES01467, ES01867, and ES02167**).

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150, ES05150, ES00050, ES00167, ES01267, ES01367, ES01467, ES01867, and ES02167**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150, ES05150, ES00050, ES00167, ES01267, ES01367, ES01467, ES01867, and ES02167**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a. above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and

iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**B. Surface Coating Operations - Plastic & Metal Parts and Products consisting of:**

- **Spray Paint Operations (ID No. SP) consisting of:**
  - SMC Paint Spray Booth No. 1 (ID No. ES01051),
  - SMC Paint Spray Booth No. 2 (ID No. ES00951),
  - SMC Paint IR Bake Oven (ID No. ES00451),
  - SMC Paint Touch-up Booth (ID No. ES00651),
  - SMC Paint Room (ID No. ES01151), and
  - SMC Paint flashoff Tunnel (ID No. ES60051)
- **Pad Printing Operations (ID No. PRT) consisting of:**
  - Eleven pad printers (ES00187, ES03165, ES03265, ES03365, ES03865, ES03965, ES11050, ES11150, ES11250, ES11450, and ES11550)
- **Powder Paint Operations (ID No. PP) [See Section 2.3]**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For $P \leq 30$ , $E = 4.10 \times P^{0.67}$ For $P > 30$ , $E = 55.0 \times P^{0.11} - 40$  Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odors	<b>State-enforceable Only</b> See Section 2.2.A.	15A NCAC 02D .1806
Volatile organic compounds	See Section 2.2.B	15A NCAC 02Q .0317 for 02D .0530 PSD Avoidance
Hazardous air pollutants	See Section 2.2.C.	15A NCAC 02D .1111 MACT WWW

**1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

- a. Emissions of particulate matter from these sources (**ID Nos. SP, PRT, and PP**) shall not exceed an allowable emission rate as calculated by the following equations:

$$E = 4.10 \times P^{0.67} \quad (\text{for process rates less than or equal to 30 tons per hour}), \text{ or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad (\text{for process rates greater than 30 tons per hour})$$

Where E = allowable emission rate in pounds per hour  
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 002Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting for particulate emissions from these sources (**ID Nos. SP, PRT, and PP**) is required.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources (**ID Nos. SP, PRT, and PP**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas or propane in these sources (**ID Nos. SP, PRT, and PP**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these emission sources (**ID Nos. SP, PRT, and PP**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. SP, PRT, and PP**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this

requirement. If visible emissions from these sources (**ID Nos. SP, PRT, and PP**) are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a. above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**C. Four Natural gas-fired boilers (ID Nos. ES-03140, ES-03240, ES-04450, and ES-04550)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.45 pounds per million Btu	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDDD)

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**) into the atmosphere shall not exceed 0.45 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in Section 2.1 C.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**).

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources (**ID Nos. ES-03140, ES-03240, ES-04550, and ES-04450**).

**4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**Applicability** [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

- a. For these sources (**ID Nos. ES-03140 and ES-03240**) (*existing sources(s) designed to burn gas 1 fuels with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major

Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” and Subpart A “General Provisions.”

**Definitions and Nomenclature** [§63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

**40 CFR Part 63 Subpart A General Provisions** [§63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

**Compliance Date** [§63.56(b), §63.7510(e)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. This requirement has been met.

**Notifications** [§63.7545(e)(1), (8), §63.7530(e)]

- e. The Permittee shall submit a Notification of Compliance Status to the DAQ. The notification must be signed by a responsible official and submitted by July 19, 2019. This requirement has been met.

**Work Practice Standards** [15A NCAC 02Q .0508(f)]

- f. i. The Permittee shall conduct a tune-up of the process heater every two years as specified below.
  - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burn inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown).
  - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
  - (D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject; and
  - (E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[§63.7500(a), (e), §63.7540(a)(10), (a)(11)]
- ii. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40CFR 63.7515(d)]
- ii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]
- iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.7500(a)(3)]
- v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in **Section 2.1 C.4.f** are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. This requirement has been met.

**Recordkeeping Requirements** [15A NCAC 02Q .0508(f), §63.7555]

- h. The Permittee shall:
- i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or biennial compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [§ 63.7555(a)(1)]
  - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
    - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;
    - (B) a description of any corrective actions taken as a part of the tune-up; and
    - (C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.[§63.7540(a)(10)(vi)]
  - iii. keep the associated records for **Sections 2.1 C.4.f through g.**
  - iv. maintain records in a form suitable and readily available for expeditious review.
  - v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record;
  - vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.  
[§63.7560, §63.10(b)(1)]
  - vii. be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in **Section 2.1 C.4.h** are not met.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

- i. i. The Permittee shall submit compliance reports to the DAQ on a 2-year basis. The first report shall cover the period beginning on the May 20, 2019 and ending on December 31, 2020. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30 for the preceding reporting period. [§63.7550(a), (b)]
- ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [§63.7550(h)(3)]
- iii. The compliance report must contain the following information:
- (A) company name and address;
  - (B) process unit information, emissions limitations, and operating parameter limitations;
  - (C) date of report and beginning and ending dates of the reporting period;



- (D) include the date of the most recent tune-up for each unit required according to **Section 2.1 C.4.f**. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
- (E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.  
[§63.7550(a) and (c), Table 9]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in **Section 2.1 C.4.i** are not met.

## 5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

### **Applicability** [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

- a. For these sources(s) (**ID Nos ES-04450 and ES-04550**) (*existing sources designed to burn gas 1 fuels with a heat input capacity of less than or equal to 5 million Btu per hour*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

### **Definitions and Nomenclature** [§63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

### **40 CFR Part 63 Subpart A General Provisions** [§63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

### **Compliance Date** [§63.7510(e), §63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. This requirement has been met.

### **Notifications** [§63.7545(e), §63.7530(e)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and submitted by July 19, 2019. This requirement has been met.

### **Work Practice Standards** [15A NCAC 02Q .0508(f)]

- f. i. The Permittee shall conduct a tune-up of the boiler every five years as specified below:
  - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months).
  - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
  - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
  - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject.

- (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.  
[§63.7500(a), (e), §63.7540(a)(12)]
- ii. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up.  
[§63.7515(d)]
- iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]
- iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.[§63.7500(a)(3)]
- v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section **2.1 C.5.f** are not met.

**Energy Assessment Requirements** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. This requirement has been met.

**Recordkeeping Requirements** [15A NCAC 02Q .0508(f), §63.7555]

- h. The Permittee shall:
  - i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or 5-year compliance report that has been submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.7555(a)(1)]
  - ii. maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (A) through (C) below:
    - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after tune-up of the boiler or process heater;
    - (B) a description of any corrective actions taken as a part of the tune-up; and
    - (C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.  
[§63.7540(a)(10)(vi)]
  - iii. keep the associated records for **Sections 2.1 C.5.f through g**.
  - iv. maintain records in a form suitable and readily available for expeditious review;
  - v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
  - vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.  
[§63.7560, §63.10(b)(1)]
  - vii. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in **Sections 2.1 C.5.h**.

**Reporting Requirements** [15A NCAC 02Q .0508(f)]

- i. i. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on May 20, 2019 and ending on December 31, 2023.

Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30 for the preceding reporting period. [§63.7550(a), (b)]

- ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [§63.7550(h)(3)]
- iii. The compliance report must contain the following information:
  - (A) Company name and address;
  - (B) Process unit information, emissions limitations, and operating parameter limitations;
  - (C) Date of report and beginning and ending dates of the reporting period;
  - (D) Include the date of the most recent tune-up for each unit required according to **Section 2.1 C.5.f**. Include the date of the most recent burner inspection if it was not done on a 5-year basis and was delayed until the next scheduled or unscheduled unit shutdown; and
  - (E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.[§63.7550(a) and (c), Table 9]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in **Section 2.1 C.5.i** are not met.

## 2.2 - Multiple Emission Sources Specific Limitations and Conditions

### A. Facility-wide Emission Sources

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odorous emissions	<b>State-enforceable Only</b> Adequate measures to minimize odorous emissions	15A NCAC 02D .1806

#### State-Enforceable Only

##### 1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

**B. Limits to avoid Prevention of Significant Deterioration (PSD)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	<b><u>PSD Avoidance Limit #1</u></b> less than 250 tons per year (ID Nos. ES01267, ES01367, ES01467, ES02167, ES01867, ES00167, ES00050, ES00150, ES01150, ES02150, ES03150, ES04150, and ES05150; and IS10, IS11, IS12, IS13, IS18, IS19, IS21, IS23, IS24, IS10091, IS12052, IS50052 and IS06642)	15A NCAC 02Q .0317 for 02D .0530 (PSD avoidance)
	<b><u>PSD Avoidance Limit #2</u></b> less than 250 tons per year (ID Nos. ES01151, ES01051, ES00951, ES00451, ES00651, ES03165, ES03265, ES03365, ES03865, ES03965, ES11550, ES11050, ES11150, ES11250, ES11450, ES60051, ES00187, and IS77750)	

**1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of this regulation, these sources (ID Nos. ES01267, ES01367, ES01467, ES02167, ES01867, ES00167, ES00050, ES00150, ES01150, ES02150, ES03150, ES04150, ES05150, IS10, IS11, IS12, IS13, IS18, IS19, IS21, IS23, IS24, IS10091, IS12052, IS50052 and IS06642) shall discharge into the atmosphere less than 250 tons of VOCs per consecutive 12-month period.
- b. In order to avoid applicability of this regulation, these sources (ID Nos. ES01151, ES01051, ES00951, ES00451, ES00651, ES03165, ES03265, ES03365, ES03865, ES03965, ES11550, ES11050, ES11150, ES11250, ES11450, ES60051, ES00187, and IS77750) shall discharge into the atmosphere less than 250 tons of VOCs per consecutive 12-month period.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.
- d. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept or the VOC emissions exceed the above limits in Sections 2.2 B.1.a and/or b above.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.2 B.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

**C. Facility-wide Maximum Achievable Control Technology (MACT) Affected Sources**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	Work practice standards for closed molding, cleaning, storage and handling, and SMC manufacturing operations.	15A NCAC 02D .1111 (40 CFR 63, Subpart WWWW)
	Limit organic HAP emissions to no more than 0.16 pounds (lb) organic HAP per lb coating solids used during each 12-month compliance period ( <b>2.0 lb organic HAP/gal coating solids</b> )	15A NCAC 02D .1111 (40 CFR 63, Subpart PPPP)
	Powder Coating Operations Exempt per §63.3881(c)(1) [See Section 2.3] Pad printers (Comply with more stringent MACT limit under Subpart PPPP)	15A NCAC 02D .1111 (40 CFR 63, Subpart MMMM)

**1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY  
(40 CFR Part 63, Subpart WWWW)**

**APPLICABILITY**

- a. The fiberglass reinforced polyester resin manufacturing and molding operations listed below shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" and 40 CFR Part 63 Subpart WWWW "National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production." [40 CFR § 63.5785 & 63.5790]
  - i. Six compression presses (ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150 and ES05150),
  - ii. Compound storage room (ID No. ES00050),
  - iii. SMC machine (ID No. ES00167),
  - iv. Styrene bulk storage tank (ID No. ES01267),
  - v. Liquid polyester resin bulk storage tank (ID No. ES01367),
  - vi. Polyester resin bulk storage tank (ID No. ES01467),
  - vii. SMC paste weighing station (ID No. ES01867), and
  - viii. SMC paste mixing station (ID No. ES02167)

**DEFINITIONS** [40 CFR § 63.5935]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR § 63.5935 shall apply.

**REGULATED MATERIALS** [40 CFR § 63.5780 & 63.5808]

- c. This Subpart requires the Permittee to limit organic hazardous air pollutant (HAP) emissions. Organic HAP shall have the meaning as defined in 40 CFR § 63.5935 and 63.5797.

**40 CFR Part 63 Subpart A "GENERAL PROVISIONS"** [40 CFR § 63.5929]

- d. The Permittee shall comply with the requirements of 40 CFR § 63 Subpart A "General Provisions" according to the applicability of Subpart A to such sources as referenced in Table 15 and § 63.5835 of this Subpart.

**WORK PRACTICE STANDARDS** [40 CFR 63.5805(b), 40 CFR 63.5835, 40 CFR 63.5900(a)(4)]

- e. The Permittee shall meet each work practice requirement in Table 4 to 40 CFR 63, Subpart WWWW per 40 CFR 63.5805, as applicable. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these work practice requirements are not met.

- f. At each compression molding press (**ID Nos. ES00150, ES01150, ES02150, ES03150, ES04150, and ES05150**), the Permittee shall uncover, unwrap, or expose only one charge per mold cycle.
  - i. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials.
  - ii. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if more SMC is exposed per mold cycle than is permitted above.
- g. The Permittee shall not use cleaning solvents that contain HAP at the affected sources, except that:
  - i. Styrene may be used as a cleaner in closed systems; and,
  - ii. Organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if it uses cleaning solvents that contain HAP at the affected sources, except as provided in (i) and (ii) above.
- h. The Permittee shall keep containers (**ID Nos. ES01267, ES01367, and ES01467**) that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing material storage tanks may be vented as necessary for safety. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if HAP-containing materials are not closed or covered as required above.
- i. The Permittee shall close or cover the resin delivery system to the doctor box at the SMC Machine (**ID No. ES00167**). The doctor box itself may be open. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the resin delivery system is not closed or covered as required above.
- j. The Permittee shall use a nylon-containing film to enclose manufactured SMC. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if a nylon-containing film is not used to enclose manufactured SMC as provided above.
- k. The Permittee shall keep the mixer (**ID No. ES02167**) covers closed during the actual mixing except when adding materials or opening the cover for safety. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the mixer is not closed or covered as required above.

**Recordkeeping** [40 CFR 63.5860, 63.6905, 63.5915 & 63.5920]

- 1. The Permittee shall retain the following records:
  - i. A copy if the Notification of Initial Startup submitted to the Regional Supervisor, DAQ, pursuant to 40 CFR 63.9(b)(4)(v);
  - ii. A copy if the Notification of Initial Compliance Status submitted to the Regional Supervisor, DAQ, pursuant to 40 CFR 63.9(h);
  - iii. A copy of each Semiannual Compliance Report submitted to the Regional Supervisor, DAQ, pursuant to 40 CFR 63.9(h); and,
  - iv. A certified statement that the Permittee is in compliance with the work practice requirements provided in Section 2.2.C.1.e. through k. of this permit.
 The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the records listed above are not retained.

**Reporting** [§63.5910, and Table 14 to 40 CFR Part 63 Subpart WWW]

- m. **Semiannual Compliance Reports**. The Permittee shall submit a semiannual compliance report by January 30<sup>th</sup> (covering the previous period between July 1<sup>st</sup> and December 31<sup>st</sup>) and July 30<sup>th</sup> (covering the previous period between January 1<sup>st</sup> and June 30<sup>th</sup>). The semiannual compliance report shall include the following information:
  - i. Company name and address;
  - ii. Statement by the Responsible Official with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
  - iii. Start and end dates of the compliance period covered in the report;
  - iv. If there were no deviations from the work practice standards provided in Section 2.2.C.1.e.-k. of this permit, include a statement as such; and,

- v. If there were deviations from the work practice standards provided in Section 2.2.C.1.e.-k., include information listed in 40 CFR 63.5910(b).

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the reports listed above are not submitted.

**2. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY  
(40 CFR Part 63 Subpart PPPP)**

**APPLICABILITY**

- a. The surface coating operations listed below shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" and 40 CFR Part 63 Subpart PPPP "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products." [40 CFR § 63.4480 & 63.4481]
  - i. Spray Paint Operations (ID No. SP) consisting of:
    - A. SMC Paint Spray Booth No. 1 (ID No. ES01051),
    - B. SMC Paint Spray Booth No. 2 (ID No. ES00951),
    - C. SMC Paint IR Bake Oven (ID No. ES00451),
    - D. SMC Paint Touch-up Booth (ID No. ES00651),
    - E. SMC Paint Room (ID No. ES01151), and
    - F. SMC Paint Flash-off Tunnel (ID No. ES60051)
  - ii. Pad Printing Operations (ID No. PRT) consisting of:
    - A. Eleven pad printers (ES00187, ES03165, ES03265, ES03365, ES03865, ES03965, ES11050, ES11150, ES11250, ES11450, and ES11550)

**DEFINITIONS** [40 CFR § 63.4581]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR § 63.4581 shall apply.

**REGULATED MATERIALS** [40 CFR § 63.4490]

- c. This Subpart requires the Permittee to limit organic hazardous air pollutant (HAP) emissions. Organic HAP shall have the meaning as defined in 40 CFR § 63.4581 and 63.4490.

**40 CFR Part 63 Subpart A "GENERAL PROVISIONS"**

- d. The Permittee shall comply with the requirements of 40 CFR § 63 Subpart A "General Provisions" according to the applicability of Subpart A to such sources as referenced in Table 2 and § 63.4501 of this Subpart.

**EMISSION LIMITATIONS** [40 CFR 63.4490 & 63.4500]

- e. Organic HAP emissions from all affected materials, including coatings, thinners and/or other additives, and cleaning materials, shall not exceed 0.16 kilograms (kg) per kg coating solids used during any consecutive 12-month period.

**COMPLIANCE OPTIONS AND OPERATING REQUIREMENTS** [40 CFR 63.4491 through 63.4493]

- f. For the emission sources subject to "MACT Subpart PPPP", as indicated above and in the permitted equipment list, the Permittee shall comply with emission limitations, compliance options, and operating requirements described in paragraph (b) of 40 CFR 63.4490 and 63.4491, determined according to the requirements in §63.4540, §63.4541, §63.4542, §63.4550, §63.4551, or §63.4561. [40 CFR 63.4490 & 63.4491]
- g. The Permittee shall include all coatings, thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Section 2.2.C.2.e. above. To make this determination, the Permittee shall use at least one of the following two compliance options. The Permittee may apply any of the

compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The Permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The Permittee may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, the Permittee may not use different compliance options at the same time on the same coating operation. If the Permittee switches between compliance options for any coating operation or group of coating operations, he shall document this switch as required by Section 2.2.C.2.k.iii below, and shall report it in the next semiannual compliance report required in Section 2.2.C.2.l. below.

- i. Compliant material option. Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2.C.2.e. above, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The Permittee shall meet all of the following requirements to demonstrate compliance with the applicable emission limit using this option:
  - A. The Permittee shall complete the initial compliance demonstration for the initial compliance period ending **April 30, 2008**, according to the requirements in Section 2.2.C.2.g.i.B. below. The demonstration shall include the calculations and supporting documentation showing that during the initial compliance period, the Permittee used no coating with an organic HAP content that exceeded the applicable emission limit in Section 2.2.C.2.e. above, and that he used no thinners and/or other additives, or cleaning materials that contained organic HAP. This requirement has been met.
  - B. The Permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the emission rate without add-on controls option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in Section 2.2.C.2.e. above and must use no thinner and/or other additive, or cleaning material that contains organic HAP. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. The Permittee does not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.
1. Determine the mass fraction of organic HAP for each material used. The Permittee shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following options:
  - (a). Method 311 (appendix A to 40 CFR part 63). The Permittee may use Method 311 for determining the mass fraction of organic HAP by using the following procedures:
    - (i). Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, the Permittee does not have to count it. Express the mass fraction of each organic HAP for which the Permittee counts, as a value truncated to four places after the decimal point (e.g., 0.3791)
    - (ii). Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).



- (b). Method 24 (appendix A to 40 CFR part 60). For coatings, the Permittee may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. The Permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.
  - (c). Alternative method. The Permittee may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The Permittee shall follow the procedure in 63.7(f) to submit an alternative test method for approval.
  - (d). Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in Section 2.2.C.2.g.i.B.1. (a) through (c) above, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, the Permittee does not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Section 2.2.C.2.g.i.B.1. (a) through (c) above, then the test method results will take precedence unless, after consultation, the Permittee demonstrates to the satisfaction of DAQ that the formulation data are correct.
  - (e). Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP, which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the Permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this Subpart. If the Permittee uses the tables, he shall use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and may use Table 4 only if the solvent blends in the materials do not match any of the solvent blends in Table 3 and he knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, he demonstrates to the satisfaction of DAQ that the formulation data are correct.
2. Determine the mass fraction of coating solids for each coating. The Permittee shall determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in Section 2.2.C.2.g.i.B.2. (a) through (c) below.
- (a). Method 24 (appendix A to 40 CFR part 60). The Permittee may use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, you may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.
  - (b). Alternative method. The Permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in Sec. 63.7(f) to submit an alternative test method for approval.

- (c). Information from the supplier or manufacturer of the material. The Permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the DAQ that the formulation data are correct.
3. Calculate the organic HAP content of each coating. The Permittee may determine the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using the following equation:

$$H_c = \frac{W_c}{S_c} \quad (\text{Eq. 1})$$

Where:  $H_c$  = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

$W_c$  = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to Section 2.2.C.2.g.i.B.1. (a) through (c) above.

$S_c$  = Mass fraction of coating solids, kg coating solids per kg coating, determined according to Section 2.2.C.2.g.i.B.2. (a) through (c) above.

4. Compliance demonstration. The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in Section 2.2.C.2.e. above; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to Section 2.2.C.2.g.i.B.1 above. The Permittee shall keep all records required by Section 2.2.C.2.k. below. As part of the notification of compliance status required in Section 2.2.C.2.j. below, the Permittee shall identify the coating operation(s) for which he used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2.C.2.e. above, and he used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in Section 2.2.C.2.g.i.B.1 above.
- C. 1. For each compliance period to demonstrate continuous compliance, the Permittee shall use no coating for which the organic HAP content (determined using Equation 1 of Section 2.2.C.2.g.i.B.3. above) exceeds the applicable emission limit in Section 2.2.C.2.e. above, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to Section 2.2.C.2.g.i.B.1 above. A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in Section 2.2.C.2.g.i.A. above, is the end of a compliance period consisting of that month and the preceding 11 months.
2. If the Permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in Section 2.2.C.2.g.i.C.1 above is a deviation from the emission limitations that must be reported as specified in Section 2.2.C.2.j.vi below and/or Section 2.2.C.2.l.ix below.
3. As part of each semiannual compliance report required by Section 2.2.C.2.l. below, the Permittee shall identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in Section 2.2.C.2.e. above, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2.C.2.e. above,

and he used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to Section 2.2.C.2.g.i.B.1 above.

4. The Permittee shall maintain records as specified in Section 2.2.C.2.k below.
- ii. Emission rate without add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2.C.2.e. above, calculated as a rolling 12-month emission rate and determined on a monthly basis. The Permittee shall meet all of the following requirements to demonstrate compliance with the emission limit using this option.
  - A. The Permittee shall complete the initial compliance demonstration for the initial compliance period ending on **April 30, 2008**, according to the requirements of Section 2.2.C.2.g.ii.B below. The Permittee shall determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The demonstration shall include the calculations according to Section 2.2.C.2.g.ii.B below and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Section 2.2.C.2.e. above. This requirement has been met.
  - B. The Permittee may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the compliant material option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in Section 2.2.C.2.e. above. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option. The Permittee does not need to re-determine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the emission rate without add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.
    1. Determine the mass fraction of organic HAP for each material. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Section 2.2.C.1.g.i.B.1 above.
    2. Determine the mass fraction of coating solids. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in Section 2.2.C.2.g.i.B.2 above.
    3. Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of DAQ that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 2, 3, 4, and 5 below.
    4. Determine the volume of each material used. Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by

measurement or usage records. If the Permittee purchases materials or monitors consumption by weight instead of volume, he does not need to determine the volume of each material used. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 2, 3, 4 and 5 below.

5. Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 2 of this section.

$$H_e = A + B + C - R_w \quad (\text{Eq. 2})$$

Where:

$H_e$  = Total mass of organic HAP emissions during the month, kg.

$A$  = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 3 of this section.

$B$  = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 4 of this section.

$C$  = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 5 of this section.

$R_w$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Section 2.2.C.2.g.ii.B.5.(d). below. The Permittee may assign a value of zero to  $R_w$  if he does not wish to use this allowance.

- (a). Calculate the kg of organic HAP in the coatings used during the month using Equation 3 below:

$$A = \sum_{i=1}^m (\text{Vol}_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 3})$$

Where:

$A$  = Total mass of organic HAP in the coatings used during the month, kg

$\text{Vol}_{c,i}$  = Total volume of coating,  $i$ , used during the month, liters.

$D_{c,i}$  = Density of coating,  $i$ , kg coating per liter coating.

$W_{c,i}$  = Mass fraction of organic HAP in coating,  $i$ , kg organic HAP per kg coating. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

$m$  = Number of different coatings used during the month.

- (b). Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 4 of this section:

$$B = \sum_{j=1}^n (\text{Vol}_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Eq. 4})$$

Where:

$B$  = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

- Vol<sub>t,j</sub> = Total volume of thinner and/or other additive, j, used during the month, liters.  
D<sub>t,j</sub> = Density of thinner and/or other additive, j, kg per liter.  
W<sub>t,j</sub> = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.  
n = Number of different thinners and/or other additives used during the month.

- (c). Calculate the kg of organic HAP in the cleaning materials used during the month using Equation 5 of this section:

$$C = \sum_{k=1}^p (\text{Vol}_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 5})$$

Where:

- C = Total mass of organic HAP in the cleaning materials used during the month, kg.  
Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the month, liters.  
D<sub>s,k</sub> = Density of cleaning material, k, kg per liter.  
W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.  
p = Number of different cleaning materials used during the month.

- (d). If the Permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then he shall determine the mass according to the procedures in 40 CFR 63.4551 (e)(4).

6. Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 6 of this section:

$$M_{st} = \sum_{i=1}^m (\text{Vol}_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 6})$$

Where:

- M<sub>st</sub> = Total mass of coating solids used during the month, kg.  
Vol<sub>c,i</sub> = Total volume of coating, i, used during the month, liters.  
D<sub>c,i</sub> = Density of coating, i, kgs per liter coating, determined according to Section 2.2 - C.2.g.ii.B.3 above  
M<sub>s,i</sub> = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to Section 2.2.C.2.g.i.B.2 above  
m = Number of coatings used during the month.

7. Calculate the organic HAP emission rate. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 7 of this section:

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n M_{st}} \quad (\text{Eq. 7})$$

Where:

- $H_{yr}$  = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.
- $H_e$  = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.
- $M_{st}$  = Total mass of coating solids used during month, y, kg, as calculated by Equation 6 of this section.
- y = Identifier for months.
- n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

8. Compliance demonstration. The organic HAP emission rate for the initial compliance period calculated using Equation 7 of this section must be less than or equal to the emission limit in Section 2.2.C.2.e. above. The Permittee shall keep all records as required by Section 2.2.C.2.k. below. As part of the notification of compliance status required by Section 2.2.C.2.j. below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Section 2.2.C.2.e. above, determined according to the procedures in this section.
- C. 1. To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to Section 2.2.C.2.g.ii.B.1 through 7 above, must be less than or equal to the applicable emission limit in Section 2.2.C.2.e. above. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Section 2.2.C.2.g.ii.A above is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee shall perform the calculations in Section 2.2.C.2.g.ii.B.1 through 7 above on a monthly basis using data from the previous 12 months of operation.
2. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Section 2.2.C.2.e. above, this is a deviation from the emission limitation for that compliance period and must be reported as specified in Sections 2.2.C.2.j.vi and 2.2.C.2.l.x below.
3. As part of each semiannual compliance report required by Section 2.2.C.2.l. below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the Permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Section 2.2.C.2.e. above, determined according to Section 2.2.C.2.g.ii.B.1 through 7 above.

4. The Permittee shall maintain records as specified in Section 2.2.C.2.k. below.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if it does not conduct a monthly compliance demonstration as required above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2.C.2.e. above.

**Operating Limits/Work Practice Standards** [40 CFR 63.4492 and 63.4493]

- h. For the above existing sources on which the Permittee uses the compliant material option in Section 2.2.C.2.g.i above or the emission rate without add-on controls option in Section 2.2.C.2.g.ii above, the Permittee is not required to meet any operating limits or work practice standards.

**Notifications** [40 CFR 63.4510]

- i. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections.

**Recordkeeping** [40 CFR 63.4530]

- j. The Permittee shall collect and keep records of the data and information specified below. Failure to collect and keep these records is a deviation from the applicable standard.
- i. A copy of each notification and report submitted to comply with this subpart, and the documentation supporting each notification and report;
  - ii. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, he shall keep a copy of the complete test report. If the Permittee uses information provided by the manufacturer or supplier of the material that was based on testing, he shall keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier;
  - iii. For each compliance period, the records specified below:
    - A. A record of the coating operations on which the Permittee used each compliance option and the time periods (beginning and ending dates and times) for each option;
    - B. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of Section 2.2.C.2.g.i.B.3 above; and
    - C. For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 2, 3 through 5, and 7 of Sections 2.2.C.2.g.ii.B.5 through 7 above; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2.C.2.g.ii.B.5.(d). above; the calculation of the total mass of coating solids used each month using Equation 6 of Section 2.2.C.2.g.ii.B.6. above; and the calculation of each 12-month organic HAP emission rate using Equation 7 of Section 2.2.C.2.g.ii.B.7. above.
  - iv. A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the Permittee is using the compliant material option for all coatings at the source, he may maintain purchase records for each material used rather than a record of the mass used;
  - v. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period;
  - vi. A record of the mass fraction of coating solids for each coating used during each compliance period;
  - vii. If the Permittee uses an allowance in Equation 2 of Section 2.2.C.2.g.ii.B.5 above for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF), he shall keep records in accordance with 40 CFR 63.4350(g).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the above records are not maintained.

**Reporting** [40 CFR 63.4520]

- k. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following information:
- i. Company name and address;
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report
  - iii. Date of report and beginning and ending dates of the reporting period;
  - iv. Identification of the compliance option or options specified in Section 2.2.C.2.g above that you used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting period, he shall report the beginning and ending dates for each option used;
  - v. If the Permittee used the emission rate without add-on controls compliance option (Section 2.2.C.2.g.ii above), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period
  - viii. If there were no deviations from the emission limitations in Section 2.2.C.2.e. above that apply, a statement that there were no deviations from the emission limitations during the reporting period
  - ix. If the Permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in Section 2.2.C.2.e. above, the following information:
    - A. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used;
    - B. The calculation of the organic HAP content (using Equation 1 of Section 2.2.C.2.g.i.B.3 above) for each coating identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports);
    - C. The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports); and
    - D. A statement of the cause of each deviation; and
  - x. If the Permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Section 2.2.C.2.e. above, the following information:
    - A. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in Section 2.2.C.2.e. above;
    - B. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The Permittee shall submit the calculations for Equations 1, 2 through 5, 6, and 7 of Sections 2.2.C.2.g.ii.B.5 through 7 above; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2.C.2.g.ii.B.5 above. The Permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports); and
    - C. A statement of the cause of each deviation.



**3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY  
(40 CFR Part 63 Subpart Mmmm)**

**APPLICABILITY**

- a. The surface coating operations listed below shall comply with all requirements of 15A NCAC 02D .1111 “Maximum Achievable Control Technology” and 40 CFR Part 63 Subpart Mmmm “National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.”  
[40 CFR § 63.3880 & 63.6881]
  - i. Eleven pad printers (ES00187, ES03165, ES03265, ES03365, ES03865, ES03965, ES11050, ES11150, ES11250, ES11450, and ES11550).

**DEFINITIONS** [40 CFR § 63.3981]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR § 63.3981 shall apply.

**REGULATED MATERIALS** [40 CFR § 63.3890]

- c. This Subpart requires the Permittee to limit organic hazardous air pollutant (HAP) emissions. Organic HAP shall have the meaning as defined in 40 CFR § 63.3981 and 63.3890.

**40 CFR Part 63 Subpart A “GENERAL PROVISIONS”**

- d. The Permittee shall comply with the requirements of 40 CFR § 63 Subpart A “General Provisions” according to the applicability of Subpart A to such sources as referenced in Table 2 and § 63.3901 of this Subpart.

**EMISSION LIMITATIONS** [40 CFR 63.3890, 63.3891 & 63.4500]

- e. For each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

**COMPLIANCE OPTIONS AND OPERATING REQUIREMENTS** [15A NCAC 02Q .0508(f)]

- f. For the emission sources subject to “MACT Subpart Mmmm” as indicated above and in the permitted equipment list the Permittee shall comply with emission limitations, compliance options and operating requirements described in paragraph (b) of 40 CFR 63.3890. [40 CFR 63.3890]
- g. The Permittee shall demonstrate compliance with 40 CFR 63, Subpart Mmmm by demonstrating compliance with 40 CFR 63, Subpart Pppp as detailed in Section 2.2.C.2. above.  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if it does not conduct a monthly compliance demonstration as required by Section 2.2.C.2. above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2.C.2. above.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- h. The Permittee shall collect and keep records of the data and information as specified in Section 2.2.C.2. above.
- i. The Permittee shall submit reports as specified in Section 2.2.C.2. above.  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained and reports are not submitted as required by Section 2.2.C.2. above.

### 2.3 - Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

#### A. 15A NCAC 02D .1111 “Maximum Achievable Control Technology (MACT)”

40 CFR Part 63, National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products, Subpart MMMM is not applicable to the following emission sources:

Emission Source ID	Emission Source Description
Powder paint line – Dept 52 (booth vents inside)	
IS-10	One bake (dry off) oven (natural gas)
IS-11	One bake (cure) oven (natural gas)
IS-12 and IS-13	Two (entrance and exit) paint line spray washes (natural gas)
IS-12052 and IS-50052	Two (#1 & #4) heated wash tanks (natural gas)
Powder paint line – Dept 91 (booth vents inside)	
IS-21	One bake (dry off) oven (natural gas)
IS-23 and IS-24	Two bake (cure) ovens (natural gas)
IS-18 and IS-19	Two (entrance and exit) paint line spray washes (natural gas)
IS-10091	One heated wash tank (natural gas)

as determined according to §63.3941(a). The facility submitted a demonstration on June 16, 2010 that the Powder Coating Lines only use non-HAP coatings; thus, Subpart MMMM does not apply to the above listed sources in accordance with §63.3881(c)(1).

## SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements

constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

**F. Circumvention - STATE ENFORCEABLE ONLY**

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

**G. Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

**H. Changes Not Requiring Permit Modifications**

1. Reporting Requirements  
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application;
  - b. changes that modify equipment or processes; or
  - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]  
The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

**I.A. Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

**"Excess Emissions"** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

**"Deviations"** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

**Excess Emissions**

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

**Permit Deviations**

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

**I.B. Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess

emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).

2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

**J. Emergency Provisions [40 CFR 70.6(g)]**

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

**K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]**

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

**L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**M. Duty to Provide Information (submittal of information) [15A NCAC 02Q .0508(i)(9)]**

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

**N. Duty to Supplement [15A NCAC 02Q .0507(f)]**

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes

applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.



AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

**JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]**

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

**KK. Reopening for Cause [15A NCAC 02Q .0517]**

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.

5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

**LL. Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

**MM. Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

**NN. Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

**OO. Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

## ATTACHMENT

### List of Acronyms

<b>AOS</b>	Alternative Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAIR</b>	Clean Air Interstate Rule
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound